

REMARKS

Claims 17-36 are pending in the present application. In the Office Action, claims 17-20 and 23-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Amos et al., U.S. Patent No. 6,55,811 ("Amos") in view of Baer et al., U.S. Patent No. 5,866,911 ("Baer"). Claims 21-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Amos in view of Baer, as applied to claims 17-20 and 23-25 above, and further in view of Engelhardt et al., U.S. Patent No. 6,510,001 ("Engelhardt"). Claims 26-36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Amos in view of Baer, as applied to claims 17-20 and 23-25 above, and further in view of the state of the art, according to Official Notice taken by the Examiner.

The claims have now been amended. Reconsideration of the application in view of the amendments and following remarks is respectfully requested.

Information Disclosure Statement

An Information Disclosure Statement is submitted herewith for the Examiner's consideration.

Objections to the Claims

Claims 27 and 28 were objected to for minor grammatical errors. Claims 27 and 28 have now been amended in accordance with the Examiner's suggestion.

Withdrawal of the objection to claims 27 and 28 is respectfully requested.

Rejections under 35 U.S.C. §103(a):

Claims 17-20 and 23-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Amos in view of Baer.

Amos describes a confocal scanning optical microscope with a first confocal aperture 13, a prism 28, an opaque baffle 32, a plane reflector 33 and two confocal apertures 34, 36 controlling the passage of light to two detectors 35, 37. See, Amos, Figs. 1 and 2; column 1, lines 58-61; column 4,

lines 8-11; and column 4, lines 30-54. Light from a specimen is dispersed by the prism 28 and separated by the opaque baffle 32 and plane reflector 33. The light passing through the opaque baffle 32 and reflector plane 33 is focused and passes through confocal aperture 34 to detector 35. The light reflected by the plane reflector is focused and passes through confocal aperture 36 to detector 37. Amos also describes the use of a photomultiplier tube 22 as the detector. See Amos, column 2, lines 9-13.

Baer describes a scanning optical system with a slit aperture 60 in the illumination path. Light from an object is detected by a linear photodiode array 67. See Baer, column 9, lines 27-63.

Claim 17 of the present application has now been amended to recite "a detection slit diaphragm disposed in the detection beam path and configured to receive light coming from the linear illumination region from a focal plane so as to provide a confocal slit scanner." In contrast to the assertion in the Office Action dated July 25, 2007, Amos does not describe a detection slit diaphragm configured to receive light "so as to provide a confocal slit scanner," as recited in claim 17. See Office Action, page 3, lines 13-16. Amos describes a confocal scanning microscope that focuses light to a small spot on a specimen. Accordingly, Amos includes a pinhole aperture 13 from which imaging light emerges, (Amos, column 1, lines 58-61). Amos also describes a beam dispersive optical means 28 which produces separated optical means, and a beam limiting aperture for each image that is conjugate with the plane of focus of the specimen (Amos, column 2, lines 43-55). Thus, apertures 34 and 36 described in Amos are configured and positioned in front of detectors 35 and 37 at the focal plane of the small spot of light originating from the pinhole aperture. As such, Amos does not describe a slit scanner.

Claim 17 also recites "an illumination slit diaphragm disposed in the illumination beam path." It is respectfully submitted that there would have been no reason to replace the confocal aperture 13 of Amos with the slit aperture 60 of Baer, contrary to the assertion in the Office Action dated July 25, 2007. See Office Action, page 4, lines 4-6. The slit aperture 60 of Baer would allow a line of illuminating light to pass therethrough. However, Amos discloses confocal apertures 34 and 36 adjacent detectors 35 and 37, which control the light that they receive. Thus, regardless of the shape of the illuminating light, the detection light received by detectors 35 and 37 would

nonetheless be restricted to a point by confocal apertures 34 and 36. Accordingly, the addition of Baers slit aperture to the confocal scanning optical microscope of Amos would merely increase the amount of scattered light within the microscope. Accordingly, one of ordinary skill in the art would have had no reason to combine Amos and Baer as suggested in the Office Action.

Moreover, claim 17 has now been amended to recite "a spectral splitting device configured to spectrally split the light extending along the detection beam path, such that the spectrally split light includes spatial information along a first direction and spectral information along a second direction." Support for the amendment to claim 17 may be found, for example, at paragraph [0038] of the Specification. Neither Amos nor Baer describe a spectral splitting device configured to split light such that it includes spatial information along a first direction and spectral information along a second direction. In contrast, Amos merely describes a prism that spectrally splits a point of light, and the split light does not contain spatial information in a first direction. Baer does not describe any spectral splitting device at all. Because neither Amos nor Baer teach or suggest this feature of claim 17, any combination of these references, to the extent proper, could not render claim 17 or its dependent claims 18-36 obvious.

With specific regard to claim 25, this claim has now been amended to recite "a flat two dimensional detector." It is respectfully submitted that neither Amos nor Baer describe a flat two dimensional detector. In contrast, Amos describes separate point detectors and Baer describes line detectors. For this additional reason, claim 25 and its dependent claims 26-32 are further patentable over Amos and Baer.

For at least the above reasons, reconsideration and withdrawal of the rejection to claims 17-20 and 23-25 under 35 U.S.C. §103(a) in view of Amos and Baer is respectfully requested.

Claims 21-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Amos in view of Baer, as applied to claims 17-20 and 23-25 above, and further in view of Engelhardt.

Engelhardt describes the use of an AOTF or AOD as a spectrally selective element.

Claims 21 and 22 depend from claim 17. It is respectfully submitted that the addition of Engelhardt to the combination of Amos and Baer does not cure the deficiencies of those references

for rendering claim 17 obvious. Accordingly, claims 21 and 22 are patentable for at least the same reasons as claim 17.

Withdrawal of the rejections to claims 21-22 under 35 U.S.C. §103(a) in view of Amos, Baer and Engelhardt is respectfully requested.

Claims 26-36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Amos in view of Baer and further in view of the Examiner's statement of what was known in the art at the time of the invention, for which Official Notice has been taken.

Claims 26-36 depend from claim 17 and are patentable over Amos and Baer for at least the same reasons as claim 17. Further, Applicants submit that no documentary evidence has been provided to support the contention that it would have been obvious to replace the photomultiplier tube 22 described by Amos with a CCD element. It is respectfully submitted that neither Amos nor Baer describe the use of a CCD element and that it is not well known in the art to replace the detectors of Amos or Baer with a CCD element. Accordingly, Applicants respectfully request documentary evidence that such a replacement would have been obvious, in accordance with M.P.E.P. 2144.03

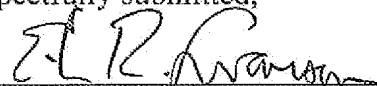
Withdrawal of the rejections to claims 26-36 under 35 U.S.C. §103(a) in view of Amos, Baer and Official Notice is respectfully requested.

REMARKS

In view of the above amendment, applicants believe the pending application is in condition for allowance.

Dated: January 25, 2008

Respectfully submitted,

By 

Erik R. Swanson

Registration No.: 40,833

DARBY & DARBY P.C.

P.O. Box 770

Church Street Station

New York, New York 10008-0770

(212) 527-7700

(212) 527-7701 (Fax)

Attorneys/Agents For Applicant